Investor group visit to CWEC, Shanghai, China
24 September, 2019
• 13:00-14:45  Buss transport Hotel – CWEC
• 14:45-15:30  Chinese marine market and CWEC
• 15:30-16:00  Factory tour
• 16:05-17:50  Buss transport CWEC – Hotel
SHIPBUILDING IN CHINA
Order book per yard country
CGT

- China P.R.: 37%
- South Korea: 26%
- Japan: 17%
- Europe: 15%
- Other: 5%

Chinese Market Share Orderbook per vessel type
CGT

- Offshore: 58%
- LPG Carrier: 26%
- LNG Carrier: 10%
- Containership: 42%
- Chemical Tanker: 57%
- Oil Tanker: 29%
- Bulkcarrier: 57%

Source: Clarkson, per Apr-2019
CHINA’S BELT AND ROAD INITIATIVE MOVING FORWARD

> 600 projects

Source: Clarkson, Lit search
Global share of tonnage financed by Chinese Leasing Companies (CGT)

- Gas carriers
- Containerships
- Tankers
- Bulk Carrier
- Others
- Total

% Global Fleet
% Global OB

Major Chinese Leasing Companies

Number of ships recorded

- Other Chinese Domestic
- Other Chinese International
- China Construction Bank
- China Ocean Shipping
- China International Marine
- Sinochem Group
- China Huarong Asset
- Aviation Industry Corporation
- China Development Bank
- China State Shipbuilding
- China Merchant Bank
- Minsheng Bank
- Bank of Communication Bank
- ICBC Bank

Source: Clarkson, per Mar-2019
Established by 2 major industry players

CSSC Wärtsilä Engine (Shanghai) Co., Ltd (CWEC)
An overview of CSSC (China State Shipbuilding Corporation)

- Established in 1999
- 70+ member units, 2 listed on Shanghai stock exchange
- 10 major shipyards
- 2 major design institutes; MARIC, SDARI
- Over 11 million DWT capacity
- In the 2018 Fortune 500 world rankings, CSSC was ranked No. 393

Source: CSSC
Wärtsilä Ventures

Joint Ventures

Wärtsilä Wenchong Service Station

Wärtsilä (Suzhou) Ltd. Formal name is Hamworthy (Suzhou) Ltd.

Sewage Water Treatment Plant, Inert Gas System, Control Panel

CSSC Wärtsilä Engine (Shanghai) Co. Ltd

Wärtsilä 26, Wärtsilä 32, Wärtsilä 34DF, Wärtsilä 46F, Wärtsilä 46DF

Wärtsilä Zhoushan IMC-YY Services Station

Wärtsilä Qingdao Beihai Service Station

CSSC Wärtsilä Electrical & Automation Shanghai Co Ltd

Wärtsilä Qiyao Diesel Shanghai Co Ltd

Wärtsilä Auxpac 20 and 26 gensets

Wärtsilä Propulsion (Wuxi) Co Ltd

TTs, LCTs, seals & bearings and components

WCN Yulian (Shekou) Dockyards Service Station

Wärtsilä China Ltd. (H.K)

Wärtsilä China Ltd.

Wärtsilä Foshan Huadong Service Station

Wärtsilä Services (Shanghai) Co Ltd, Guangzhou Office

Wärtsilä Wenchong Service Station

Wärtsilä Services (Shanghai) Co Ltd

Wärtsilä Ship Design (Shanghai) Co Ltd

Wärtsilä HRDD Services Station

Wärtsilä Zhoushan IMC-YY Services Station

Wärtsilä Services (Shanghai) Co Ltd

Wärtsilä Ship Design (Shanghai) Co Ltd

Wärtsilä HRDD Services Station

Wärtsilä Zhoushan IMC-YY Services Station

Wärtsilä Services (Shanghai) Co Ltd

Wärtsilä Ship Design (Shanghai) Co Ltd

Wärtsilä HRDD Services Station

Wärtsilä Zhoushan IMC-YY Services Station

Wärtsilä Services (Shanghai) Co Ltd

Wärtsilä Ship Design (Shanghai) Co Ltd

Wärtsilä HRDD Services Station

Wärtsilä Zhoushan IMC-YY Services Station

Wärtsilä Services (Shanghai) Co Ltd

Wärtsilä Ship Design (Shanghai) Co Ltd

Wärtsilä HRDD Services Station

1,300+ employees in Wärtsilä China
The joint venture started production in 2016

- **Joint venture agreement**: July 2014
- **Delivery of first W32 engine**: December 2016
- **Ground braking**: October 2015
- **Ground breaking**: January 2017
- **Ground breaking**: December 2018
- **Factory inauguration**: January 2017
- **Factory inauguration**: December 2018
- **Delivery of first W34DF engine**: September 2018
- **Total number of engines as of today**
  - Orders > 200
  - Delivered > 100
Focus on customer expectations

Wärtsilä proven products

State of the art facility build to purpose

Skilled and committed personnel

Strong focus on quality, health, and safety
Broad product portfolio, including leading Wärtsilä 34DF and 46DF

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<th>Engine Type</th>
<th>Rated Power</th>
<th>kW</th>
<th>5000</th>
<th>10000</th>
<th>15000</th>
<th>20000</th>
<th>Year of Start</th>
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- - 2016/17 2019
CWEC follow 100% Wärtsilä standard design, no modifications by CWEC

- All bill of materials (BoM) and drawings are made, approved and managed by Wärtsilä
- Non-standard request should be approved by Wärtsilä
- Wärtsilä engineering site support at CWEC

CWEC not a licence maker but a Joint Venture
State of the art factory

- Land plot: 80 000 m²
- Factory buildings: 21 000 m²
- Build to purpose
CWEC location

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No.383 Hongyin Road
Ni Cheng Town
Pudong
Shanghai 201306
P.R. China

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+86 21 2093 6666

Fax
+86 21 2093 6566
CWEC FACTORY TOUR ROUTE

Starting point
Evacuation assembly point